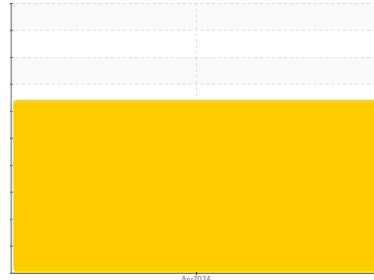




# OIL ANALYSIS REPORT

Sample Rating Trend



DIRT



Area  
**RONI**  
 Machine Id  
**883**  
 Component  
**Left Final Drive**  
 Fluid  
**JOHN DEERE HY-GARD HYD/TRANS (--- GAL)**

## DIAGNOSIS

### ▲ Recommendation

We advise that you check all areas where dirt can enter the system. We recommend that you drain the oil from the component if this has not already been done. Confirm the source of the lubricant being utilized for top-up/fill. We recommend an early resample to monitor this condition.

### ▲ Wear

Chromium ppm levels are abnormal. Aluminum ppm levels are noted. Titanium ppm levels are marginal.

### ▲ Contamination

Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress. High amount of ingressed dirt has caused abrasive wear to the component.

### ● Fluid Condition

Additive levels indicate the addition of a different brand, or type of oil. Viscosity of sample indicates oil is within SAE 90 range, advise investigate. The oil is no longer serviceable as a result of the abnormal and/or severe wear.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>WC0920833</b>	---	---
Sample Date	Client Info		<b>09 Apr 2024</b>	---	---
Machine Age	hrs	Client Info	<b>0</b>	---	---
Oil Age	hrs	Client Info	<b>0</b>	---	---
Oil Changed	Client Info		<b>N/A</b>	---	---
Sample Status			<b>ABNORMAL</b>	---	---

## CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.075	<b>NEG</b>	---	---

## WEAR METALS

	method	limit/base	current	history1	history2
PQ	ASTM D8184*	>1250	<b>152</b>	---	---
Iron	ppm	ASTM D5185(m)	>750	<b>756</b>	---
Chromium	ppm	ASTM D5185(m)	>9	<b>▲ 50</b>	---
Nickel	ppm	ASTM D5185(m)	>10	<b>4</b>	---
Titanium	ppm	ASTM D5185(m)		<b>▲ 19</b>	---
Silver	ppm	ASTM D5185(m)		<b>0</b>	---
Aluminum	ppm	ASTM D5185(m)	>40	<b>● 309</b>	---
Lead	ppm	ASTM D5185(m)	>15	<b>&lt;1</b>	---
Copper	ppm	ASTM D5185(m)	>40	<b>2</b>	---
Tin	ppm	ASTM D5185(m)	>10	<b>0</b>	---
Antimony	ppm	ASTM D5185(m)	>5	<b>0</b>	---
Vanadium	ppm	ASTM D5185(m)		<b>&lt;1</b>	---
Beryllium	ppm	ASTM D5185(m)		<b>0</b>	---
Cadmium	ppm	ASTM D5185(m)		<b>0</b>	---

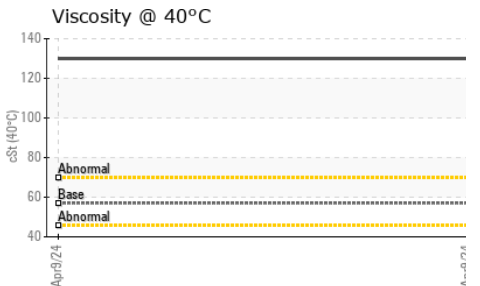
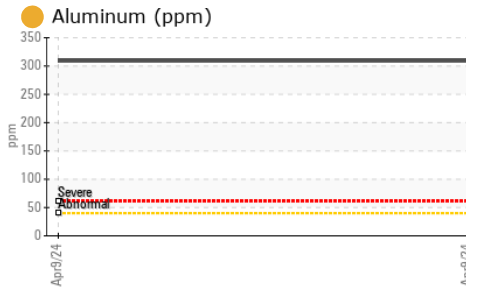
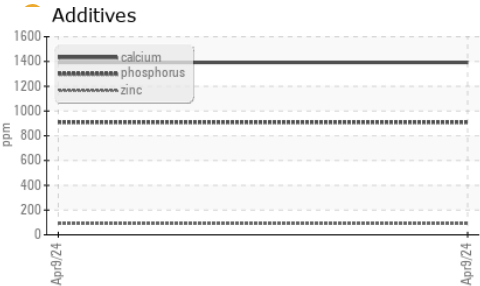
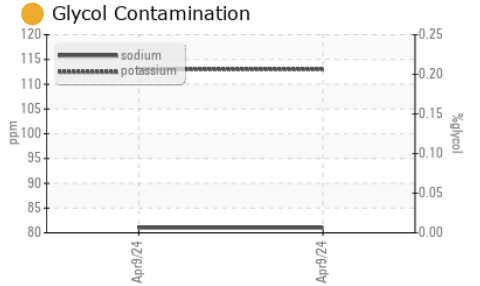
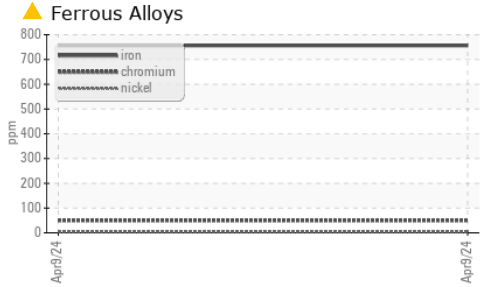
## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	6	<b>185</b>	---
Barium	ppm	ASTM D5185(m)	0	<b>4</b>	---
Molybdenum	ppm	ASTM D5185(m)	0	<b>5</b>	---
Manganese	ppm	ASTM D5185(m)		<b>15</b>	---
Magnesium	ppm	ASTM D5185(m)	145	<b>176</b>	---
Calcium	ppm	ASTM D5185(m)	3570	<b>1392</b>	---
Phosphorus	ppm	ASTM D5185(m)	1290	<b>909</b>	---
Zinc	ppm	ASTM D5185(m)	1640	<b>90</b>	---
Sulfur	ppm	ASTM D5185(m)		<b>15514</b>	---
Lithium	ppm	ASTM D5185(m)		<b>1</b>	---

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>75	<b>▲ 1322</b>	---
Sodium	ppm	ASTM D5185(m)	>51	<b>● 81</b>	---
Potassium	ppm	ASTM D5185(m)	>20	<b>● 113</b>	---

# OIL ANALYSIS REPORT



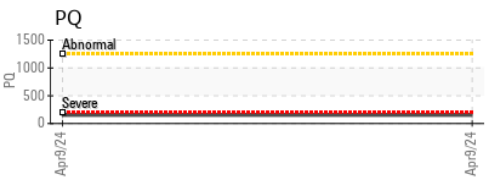
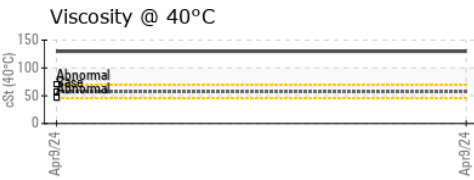
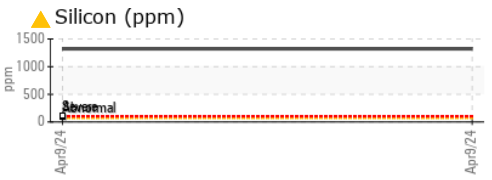
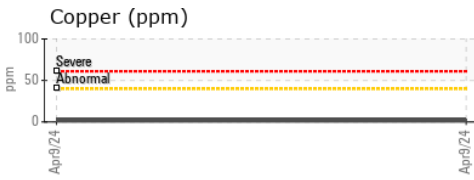
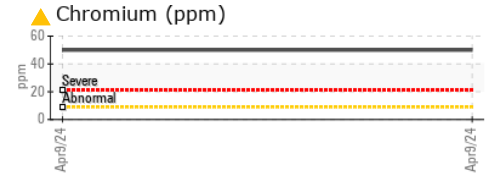
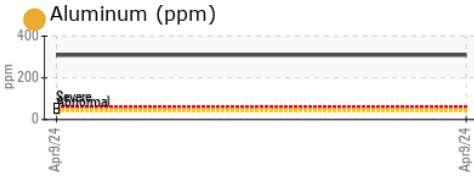
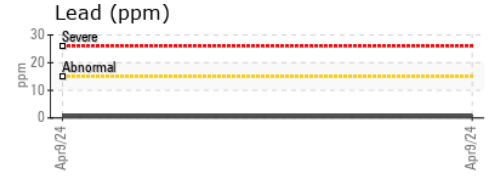
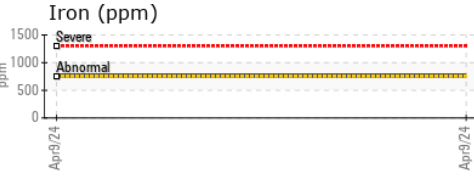
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	---
Yellow Metal	scalar	Visual*	NONE	NONE	---
Precipitate	scalar	Visual*	NONE	NONE	---
Silt	scalar	Visual*	NONE	LIGHT	---
Debris	scalar	Visual*	NONE	NONE	---
Sand/Dirt	scalar	Visual*	NONE	NONE	---
Appearance	scalar	Visual*	NORML	NORML	---
Odor	scalar	Visual*	NORML	NORML	---
Emulsified Water	scalar	Visual*	>0.075	NEG	---
Free Water	scalar	Visual*		NEG	---

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	57.0	130	---

SAMPLE IMAGES	method	limit/base	current	history1	history2
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Color		no image	no image
Bottom		no image	no image

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0920833  
**Lab Number** : 02629267  
**Unique Number** : 5762399  
**Test Package** : MOBCE ( Additional Tests: PQ, Visual )

**RONI/IRON SHORE EXCAVATING LTD.**  
 100 MACINTOSH BLVD  
 VAUGHAN, ON  
 CA L4K 4P3  
 Contact: Service Team  
 service.team@roni.ca

Received : 16 Apr 2024  
 Tested : 17 Apr 2024  
 Diagnosed : 17 Apr 2024 - Kevin Marson  
 To discuss this sample report, contact Customer Service at 1-800-268-2131.  
 Test denoted (\*) outside scope of accreditation, (m) method modified, (e) tested at external lab.  
 Validity of results and interpretation are based on the sample and information as supplied.